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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,456	01/27/2004	Steven T. Fink	247394US6 YA	8693
22850	7590	02/12/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER ZIMMERMAN, JOHN J	
			ART UNIT	PAPER NUMBER
			1775	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/764,456

Applicant(s)

FINK, STEVEN T.

Examiner

John J. Zimmerman

Art Unit

1775

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 7-24 is/are pending in the application.
- 4a) Of the above claim(s) 20-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 7-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/27/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## OFFICE ACTION

### *Amendments*

1. The "AMENDMENT" received December 6, 2006 has been entered. Claims 1, 3-5 and 7-24 are pending in this application file. Non-elected claims 20-24 remain withdrawn from consideration.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-5 and 7-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takebayashi (Japanese publication 2002-110547) in view of Harada (U.S. Patent 6,783,863) or Harada (WO 01/42526).
4. Takebayashi discloses a fastener for use in a plasma processing system wherein a plasma resistant coating is applied to the fastener (e.g. see paragraph [0016]) *except* for the threaded

Art Unit: 1775

portion (e.g. see paragraph [0018] and Figure 1(7c)). Although Takebayashi may differ from the claims in that Takebayashi does not prohibit applying the plasma resistant coating to regions other than the head of the fastener, Takebayashi clearly states that the plasma resistant coating is not applied to the threaded regions of the fastener. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made that any exposed portions of the fasteners should be coated with plasma resistant coatings as long as the threaded portions are not coated. For conventional fasteners configurations where the entire shaft is threaded, it would have been obvious to one of ordinary skill in the art that the plasma resistant coating would only occur on the enlarged head of the fastener and not on the threaded shaft. The examiner takes Official Notice that fasteners conventionally come in various configurations and that the heads typically have various male or female geometrical shapes (e.g. rectangular shapes, hexagonal shapes, square shapes, etc. . . ) to accommodate different types of fastening equipment (screw drivers, hex wrenches, socket wrenches, etc. . . ). It is understood that a typical threaded fastener in the art has a head and a threaded shaft. It would also have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the fasteners of Takebayashi in any conventional fastener configuration that would typically be used for a plasma treating apparatus because this would enable Takebayashi's fasteners to be used in different types of plasma treating apparatuses. No convincing evidence shows that the claimed configurations are anything more than ones of numerous patentably indistinct configurations a person of ordinary skill in the art would find obvious for this same purpose, *In re Dailey*, 149 USPQ 47 (CCPA 1976). Regarding claim 16, when there is a substantially similar product, as in the applied prior art, the burden of proof is shifted to the applicant to establish that their product is patentably

Art Unit: 1775

distinct not the examiner to show that the same process of making, see *In re Brown*, 173 U.S.P.Q. 685, and *In re Fessmann*, 180 U.S.P.Q. 324. Regarding claims 18-19, it would have been obvious to one of ordinary skill in the art to coat the plasma resistant coating on the fasteners in uniform and/or nonuniform thicknesses depending on the tolerances required for the fastener and the need for uniform protection or more protection or less protection at particular portions of the fastener. The thickness of the coating necessary to protect the head portion of the fastener can be readily determined in testing or in actual use. It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the thickness of the protective coating on the fastener for economics as well as to fulfill the protective function of the coating. Takebayashi may differ from the claims in that Takebayashi may not disclose the same plasma resistant coating compositions as those recited in the claims, but Harada '863 clearly shows alternative compositions in that art that are understood to be particularly suited for protecting the internal parts of plasma treating apparatuses. Harada's plasma resistant compositions include anodized films (e.g. see column 1, lines 29-40), sprayed coatings of  $\text{Al}_2\text{O}_3$ ,  $\text{Y}_2\text{O}_3$  and mixtures thereof (e.g. see column 2, lines 23-64) as well as various prior uses of rare earth compositions (e.g. see column 2, lines 3-11). Harada '526 is the PCT counterpart of Harada '863 and discloses the same subject matter but has been applied because it has an earlier publication date. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the plasma resistant coating compositions of the Harada references for the plasma resistant coating of Takebayashi because Harada's particular plasma resistant coatings have been shown to have excellent plasma resistance.

***Response to Arguments***

5. Applicant's arguments filed December 6, 2006 have been fully considered but they are not convincing. As noted above, although Takebayashi may differ from the claims in that Takebayashi does not prohibit applying the plasma resistant coating to regions other than the head of the fastener, Takebayashi clearly states that the plasma resistant coating is not applied to the threaded regions of the fastener. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made that any *exposed* portions of the fasteners should be coated with plasma resistant coatings as long as the threaded portions are not coated. For conventional fasteners configurations where the entire shaft is threaded, it would have been obvious to one of ordinary skill in the art that the plasma resistant coating should *only* occur on the enlarged head of the fastener and not on the threaded shaft. It is understood that a typical threaded fastener in the art has a head and a threaded shaft. The Official Notice that fasteners conventionally come in various configurations and that the heads typically have various male or female geometrical shapes (e.g. rectangular shapes, hexagonal shapes, square shapes, etc. . . ) to accommodate different types of fastening equipment (screw drivers, hex wrenches, socket wrenches, etc. . . ) is considered admitted prior art since no specific traversal of the Official Notice was contained in applicant's response. See MPEP 2144.03.

6. Applicant has amended the independent claim to require specific plasma resistant coating compositions. While Takebayashi may differ from the claims in that Takebayashi may not disclose the same plasma resistant coating compositions as those recited in the claims, Harada '863 is applied to clearly show alternative compositions in that art that are understood to be

Art Unit: 1775

particularly suited for protecting the internal parts of plasma treating apparatuses. Harada's plasma resistant compositions include anodized films (e.g. see column 1, lines 29-40), sprayed coatings of  $\text{Al}_2\text{O}_3$ ,  $\text{Y}_2\text{O}_3$  and mixtures thereof (e.g. see column 2, lines 23-64) as well as various prior uses of rare earth compositions (e.g. see column 2, lines 3-11). Harada '526 is the PCT counterpart of Harada '863 and discloses the same subject matter but has been applied because it has an earlier publication date. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the plasma resistant coating compositions of the Harada references for the plasma resistant coating of Takebayashi because Harada's particular plasma resistant coatings have been shown to have excellent plasma resistance.

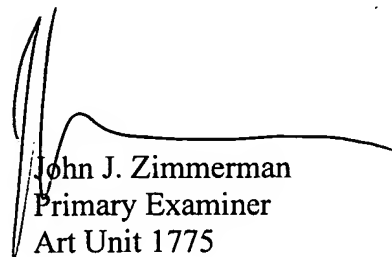
### *Conclusion*

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 1775

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Zimmerman whose telephone number is (571) 272-1547. The examiner can normally be reached on 8:30am-5:00pm, M-F. Supervisor Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John J. Zimmerman  
Primary Examiner  
Art Unit 1775

jjz  
February 5, 2007